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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/812,012	03/30/2004	Eiji Kimura	4468-017A	2780

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EXAMINER	
NGUYEN, TU T	

ART UNIT	PAPER NUMBER
2877	

DATE MAILED: 04/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/812,012	KIMURA, EIJI	
	Examiner	Art Unit	
	Tu T. Nguyen	2877	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *2,4-6,9,10,14,18,19,23,27 and 28* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *2,5,9,10,14,18,19,23,27 and 28* is/are rejected.

7)☒ Claim(s) *4 and 6* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *30 March 2004* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☒ Certified copies of the priority documents have been received in Application No. 09/877,202.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *03/30/2004*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Drawings

Figures 6,7 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Abstract

Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

For this application, the abstract has more than 150 words and should be limited to a single paragraph.

Specification

The disclosure is objected to because of the following informalities:

Specification, pages 3-22, all the claim numbers should be eliminated because at the end, the claim numbers might not be the same as the original.

Claim Objections

Claims 2,4-6,9-10,14,18-19,23,27-28 are objected to because of the following informalities:

1) Claim 2, line 1, "the characteristics" should be changed to "characteristics".

2) Claim 2, line 2, "the first optical" should be changed to "a first optical".

3) Claim 2, line 3, "the second optical" should be changed to "a second optical".

4) Claim 2, lines 5-6, the phrase "the wavelength of which is fixed" should be deleted.

5) Claim 2, lines 8-9, "the frequency of the electrical signals inputted" should be changed to "frequency of electrical signals inputted".

6) Claim 2, line 10, "the optical/electrical conversion" should be changed to "optical/electrical conversion".

7) Claim 2, lines 12-13, "the wavelength of which is variable" should be deleted.

Claims 4-6,9-10,14,18-19,23,27-28 having the same problems as discussed above.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 5 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With respect to claim 5, the claim is depended on a cancel claim 1.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 2,9-10,14,18-19,23,27-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Horiuchi et al (6,594,003).

With respect to claims 2,14,23, Horiuchi discloses an optical characteristic measuring apparatus for measuring characteristics of devices under test having a first optical transmission line 116 (fig 5) letting light through only in one direction and a second optical transmission line 112 (fig 5) letting light through only in the direction

opposite to said one direction. The apparatus comprises: a first wavelength light source 140 (fig 5) for generating a wavelength light; a first light modulating means 142 (fig 5) for introducing into said first optical transmission line 116 (fig 5) the first incident light obtained by modulating said wavelength light by the frequency of the electrical signals inputted 134 (fig 5); a first optical/electrical converting means 144 (fig 5) for converting by the optical/electrical conversion process the first outgoing light having penetrated said first optical transmission line; a variable wavelength light source 124 (fig 5) for generating a variable wavelength light; a signal source 120 (fig 5) for generating reference electrical signals of given frequencies; a second light modulating means 128 (fig 5) for introducing onto said second optical transmission line 112 (fig 5) the second incident light obtained by modulating said variable wavelength light by the frequency of said reference electrical signals; and a second optical/electrical converting means 132 (fig 5) for converting by the optical/electrical conversion process the second outgoing light having penetrated said second optical transmission line 112 (fig 5) and for outputting the converted second outgoing light 134 (fig 5) onto said first light modulating means 142 (fig 5).

Horiuchi does not disclose the fixed wavelength light source for generating a fixed wavelength light as claimed. However, it would have been obvious to modify Horiuchi's first light source with a fixed wavelength light source for measuring different characteristics of the testing device.

Horiuchi does not explicitly disclose the optical/electrical converting means as claimed. However, Horiuchi teaches using a photodetector for converting the light into

electrical signals (abstract). It would have been obvious Horiuchi's photodetectors perform the same function as the claimed converting means.

With respect to claims 9,18,27, refer to discussion in claim 1 above for the fixed wavelength light source.

With respect to claims 10,19,28, Horiuchi discloses an optical characteristic measuring apparatus for measuring characteristics of devices under test having a first optical transmission line 116 (fig 5) letting light through only in one direction and a second optical transmission line 112 (fig 5) letting light through only in the direction opposite to said one direction. The apparatus comprises: a first optical/electrical converting means 144 (fig 5) for converting by the optical/electrical conversion process the first outgoing light having penetrated said first optical transmission line; a variable wavelength light source 124 (fig 5) for generating a variable wavelength light; a signal source 120 (fig 5) for generating reference electrical signals of given frequencies; a second light modulating means 122 (fig 5) for introducing into said second optical transmission line 112 (fig 5) the second incident light obtained by modulating said variable wavelength light by the frequency of said reference electrical signals 120 (fig 5).

Horiuchi does not explicitly disclose the optical/electrical converting means as claimed. However, Horiuchi teaches using a photodetector for converting the light into

electrical signals (abstract). It would have been obvious Horiuchi's photodetectors perform the same function as the claimed converting means.

Allowable Subject Matter

Claims 4,6 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Prior arts of record do not disclose a third optical/electrical converting means for converting by the optical/electrical conversion process the reflected light generated when said second light modulating means introduces said second incident light into said second optical transmission line as claimed in claim 4.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tu T. Nguyen whose telephone number is (571) 272-2424. The examiner can normally be reached on T-F 7:30-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory Toatley Jr. can be reached on (571) 272-2800 Ext. 77. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tu T. Nguyen
Primary Examiner
Art Unit 2877

03/31/2005